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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/676,447	09/29/2000	Katsumi Shirai	3408.64755 3484		
Patrick G Burns Esq Greer Burns & Crain Ltd Sears Tower-Suite 8660 300 S Wacker Dr. Suite 2500 Chicago, IL 60606			EXAMINER  MOAZZAMI, NASSER G		
					ART UNIT
			2187	2187 DATE MAILED: 08/17/2004	
			DATE MAILED: 08/17/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)			
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Office Action Summary	09/676,447	SHIRAI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Nasser G Moazzami	2187			
The MAILING DATE of this communication appeared for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing  earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	mely filed  /s will be considered timety.  In the mailing date of this communication.  ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 29 S	September 2000.				
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1,2,4-7,9,10,12-15,17 and 18 is/are rown claim(s) 3,8,11 and 16 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or	awn from consideration. rejected.				
Application Papers					
9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 29 September 2000 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)☐ The oath or declaration is objected to by the E	/are: a) ☐ accepted or b) ☑ objected are by ☐ objected are by ance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list.	ts have been received.  ts have been received in Applicationity documents have been received in Application (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4.	4) Interview Summary Paper No(s)/Mail Da  5) Notice of Informal F  6) Other:				

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#### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### Information Disclosure Statement

2. The Information Disclosure Statement submitted by applicant on 09/29/00 has been considered by examiner. Please see attached PTO-1449.

# Drawings

- 3. The drawings are objected to because:
- Figure 1, "cash" should be changed to --cache--.
- Figure 1, element number 2 should be written for clarity.
- Figure 6, "cash" should be changed to --cache--.
- Figure 7, elements shown by numbers should be written out for clarity.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the

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remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Specification

4. Claims 1-18 is presented in this application for examination.

#### Claim Objections

5. Claims 1-18 are objected to because of the following informalities:

#### Claim 1

Line 4, "and" should be changed to --said method--.

## Claim 9

Line 4, "and" should be changed to --said method--.

Claims 2-8 and 10-18 are objected to as being dependent upon objected claims 1 and 9.

Appropriate correction is required.

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## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35
U.S.C. 102 that form the basis for the rejections under this section made in this
Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 7. Claims 1-2, 4-7, 9-10 and 17-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted Prior Art, hereinafter AAPA.

As per claims 1-2, 4-7, 9-10, 12-15 and 17-18 AAPA discloses an emulation processing method for a storage device [disk device 91 (see Fig. 10)] that accesses storage medium [disk medium 92 (see Fig. 10)] defined by a first length unit [first sector length (page 2, line 19)] by a command from the host defined by a second sector length unit [second sector length (page 2, lines 20-21)] that is shorter than the first sector length [first sector length is 2048 bytes and second sector length is 512 bytes (see page 2, lines 19-21)], said method comprising: a step of reading data of an address that is specified with a second sector length unit from said storage medium defined by a first sector length unit [host requesting with a second sector length to access the storage medium which is in first sector length]; a step of rewriting said read data defined by said first sector length unit into data defined by said second sector length unit; a step of saving said data that is read or rewritten in the first sector length unit; a step of writing said rewritten data to the storage medium;

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and a step of registering said saved data s alternate data when said writing failed [converting the sector length from one size to another and reading the actual sector address into buffer 93 from the disk 92 and transferring the read sectors to the host or writing the updated data to the disk 92 and if an error occurs, performing an alternate sector process and saving the sector address in an alternate area (page 2, line 26 through page 3, line 23)].

### Allowable Subject Matter

8. Claims 3, 8, 11 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - U.S. Patent No. 5652865 (Rawlings, III)
  - U.S. Patent No. 5459850 (Clay et al.)
  - U.S. Patent No. 5136569 (Fennema et al.)
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nasser G Moazzami whose telephone number is (703) 305-0017. The examiner can normally be reached on 7:00AM-5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (703) 308-1756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NASSER MOAZZAMI PRIMARY EXAMINER

08/10/2004